

VAPORIZER WITH CAPACITY CONTROL VALVE

ABSTRACT OF THE DISCLOSURE

A vaporizer for liquefied gas, such as liquefied petroleum gas, which includes a heat exchanger and a capacity control valve for controlling the inflow of liquefied gas to the heat exchanger. The heat exchanger has an inlet to accept liquefied gas and an outlet to release superheated gas vapor. The capacity control valve has an inlet to accept the liquefied gas from a source of liquefied gas, an outlet coupled to the inlet of the heat exchanger. The capacity control valve includes a valve positioned between the inlet and outlet of the capacity control valve, and movable between fully closed and fully open positions. The capacity control valve includes a diaphragm positioned between a thermal expansion chamber with a pressure dependent on the temperature of the gas vapor in the outlet of the heat exchanger sensed by a sensing bulb, and a liquefied gas inlet chamber with the pressure dependent on the pressure of the liquefied gas being supplied to the vaporizer by the liquefied gas source. The movements of the diaphragm move the valve to regulate the flow of liquefied gas to the heat exchanger.